

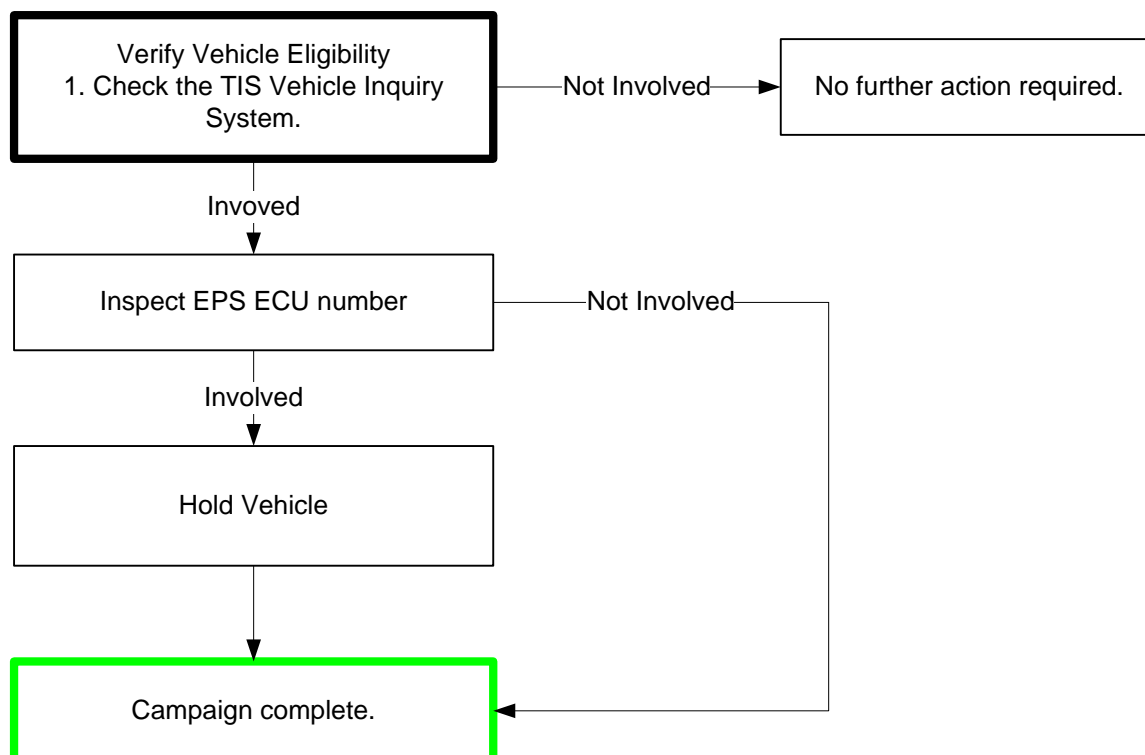
PRELIMINARY
TECHNICAL INSTRUCTIONS
FOR
SAFETY RECALL F1J
POWER STEERING ECU INSPECTION
CERTAIN 2015 MODEL YEAR HIGHLANDER & HIGHLANDER HV

FOR DEALER STOCK VEHICLES ONLY

All dealership associates involved in the recall process are required to successfully complete E-Learning course SC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold at least one of the following certifications levels:

- Toyota Certified Chassis
- Toyota Expert Chassis
- Master
- Master Diagnostic Technicians

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. COVERED VIN RANGE

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
Local Source	ZIP TIE	1

B. TOOLS & EQUIPMENT

- Standard hand tools
 - Techstream
- Torque wrench

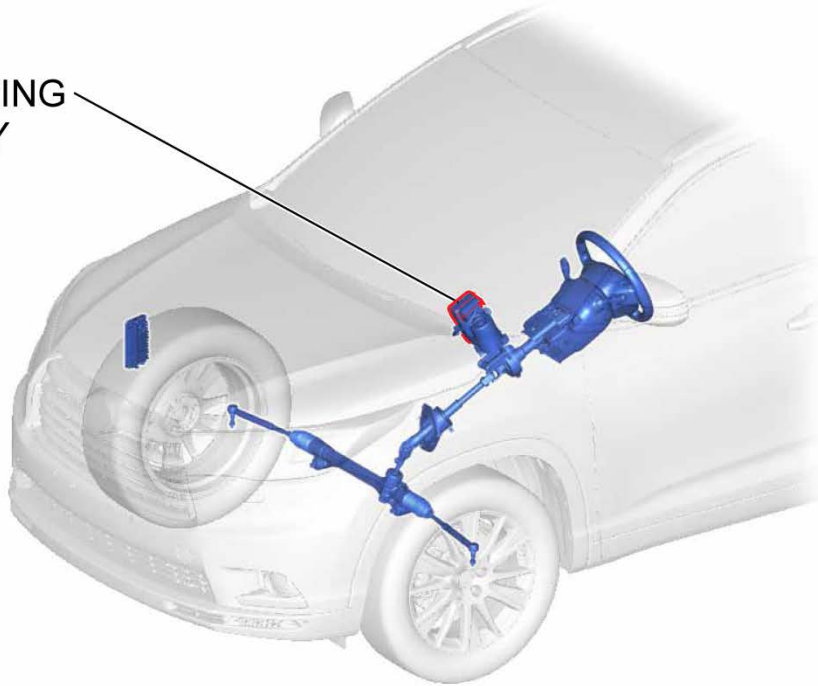
SST- These are essential special service tools that the dealership should have.

Part Number	Description	Quantity
00002-06000-01	Plastic Pry Tool Set	1

IV. BACKGROUND

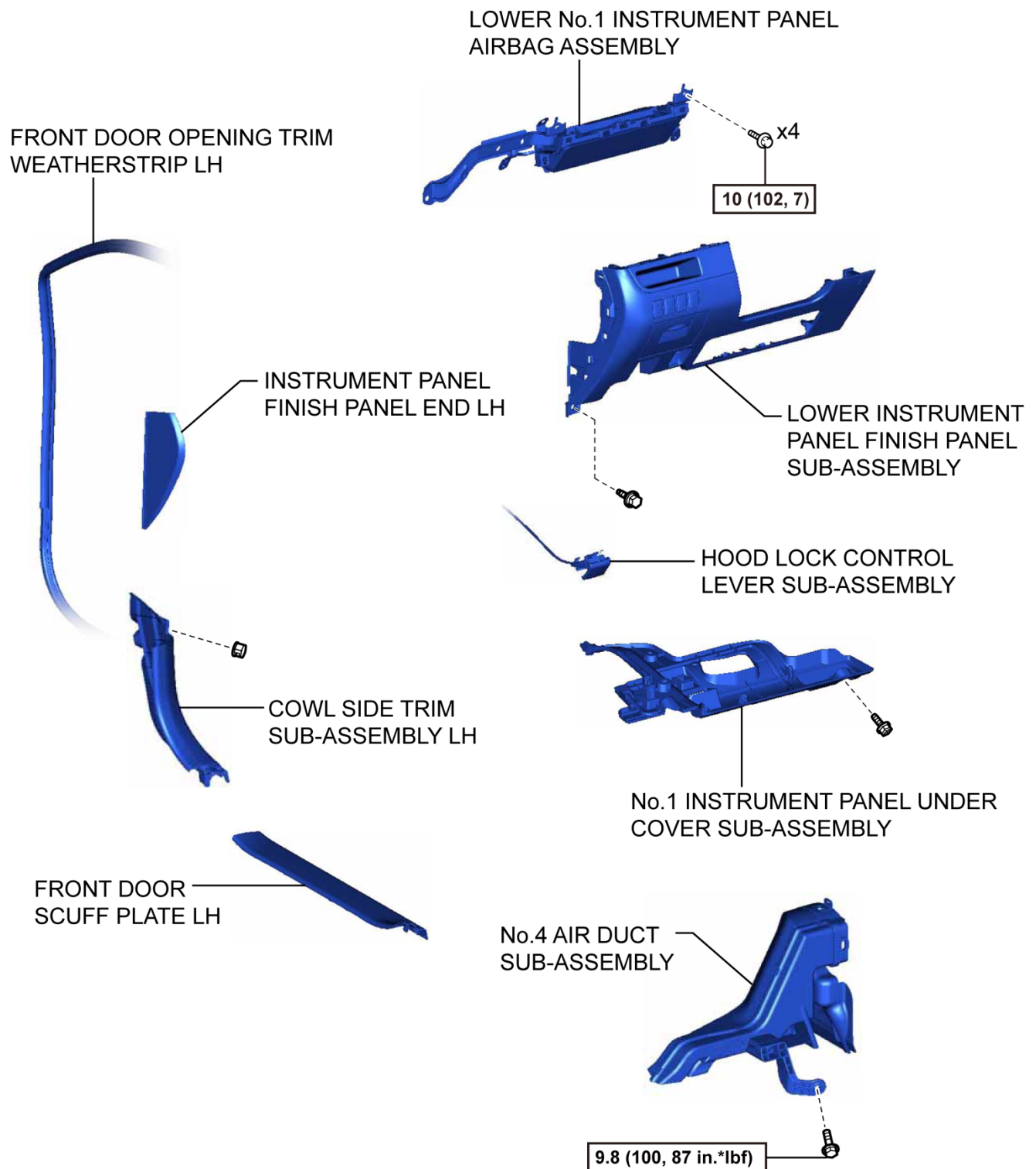
A circuit board for the electric power steering (EPS) in the subject vehicles may have been damaged during its manufacturing process. This can result in the loss of power steering assist. Manual steering is maintained, but the loss of power steering assist results in increase steering effort at low vehicle speeds and increases the risk of a crash.

POWER STEERING
ECU ASSEMBLY

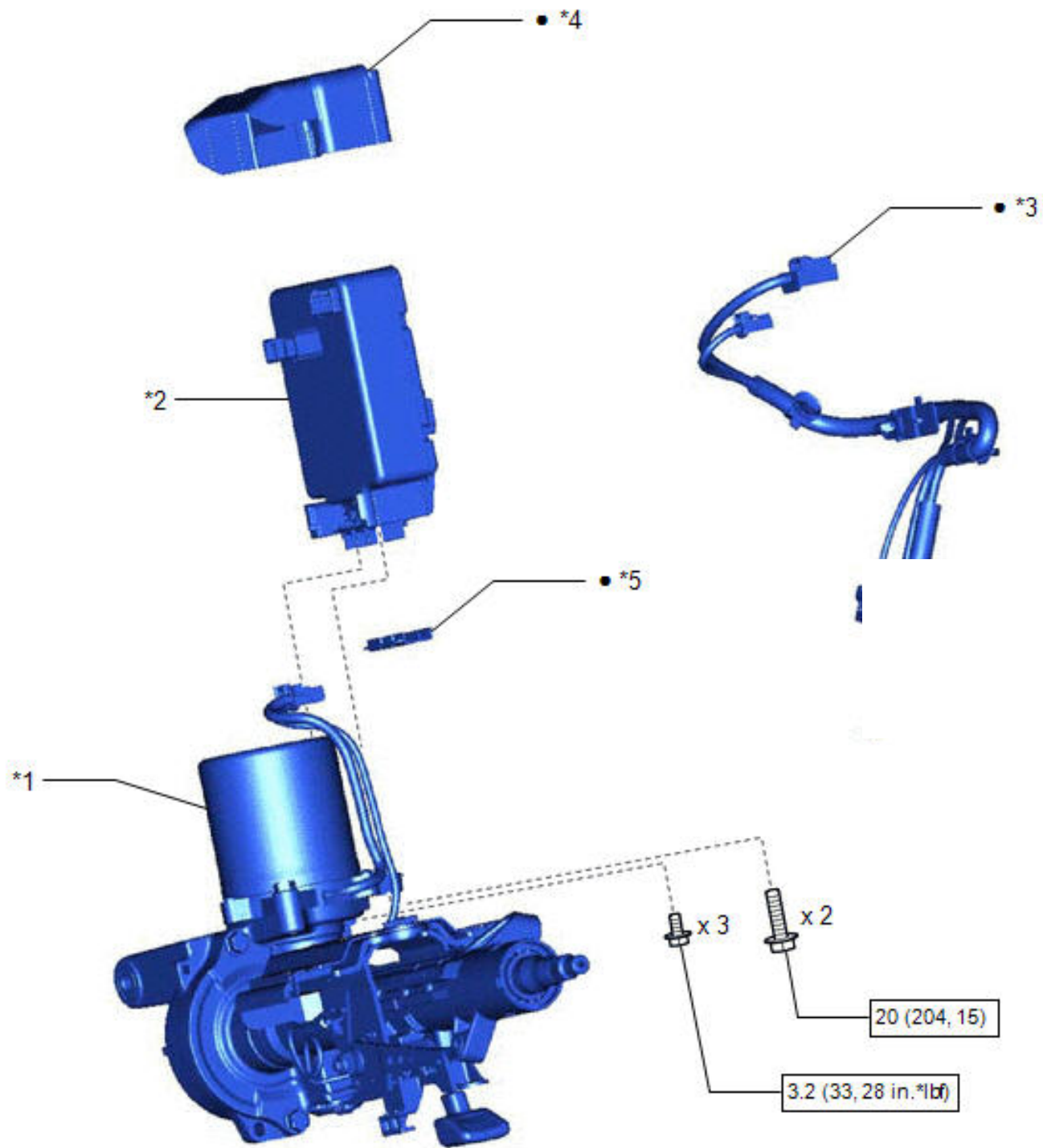


S13050aS

V. COMPONENTS



S13048aS



VI. WORK PROCEDURE

1. CHECK FOR DTCs



**This campaign only covers the inspection of the EPS ECU.
No other components in the steering system are covered by this campaign.**

- a) Using Techstream, perform a health check to confirm if there are any steering system related DTCs present in the system (**current, history or pending**).

NOTES:

- Ensure that the Techstream software is 10.0 or higher.
- On the “connect to vehicle” screen, enter the VIN number to ensure that the vehicle information is uploaded to TIS.

2. RECORD SYSTEM SETTINGS

- a) Record any audio and climate control settings prior to disconnecting the negative battery terminal.

3. PLACE THE FRONT WHEELS IN THE STRAIGHT AHEAD POSITION

4. RECORD THE POSITION OF THE STEERING WHEEL AND DRIVER’S SEAT

5. SLIDE THE DRIVER’S SEAT TO THE REARMOST POSITION AND TILT THE STEERING WHEEL UP.

6. REMOVE THE LOWER No.1 PANEL AIRBAG

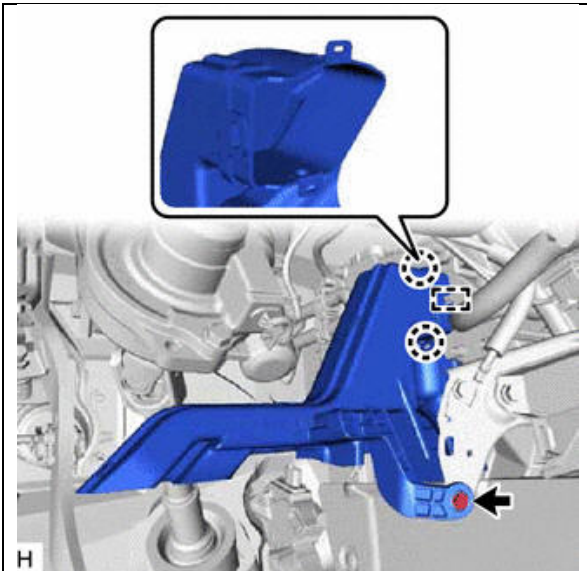
Refer to the Technical Information System (TIS), using the applicable vehicle and model year.

[Highlander](#)

[Highlander HV](#)

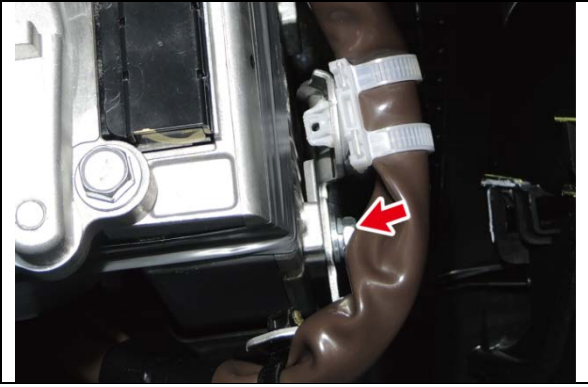
7. REMOVE THE No. 4 AIR DUCT

- a) Remove the bolt.
- b) Disengage the 2 claws and guide to remove the airduct.

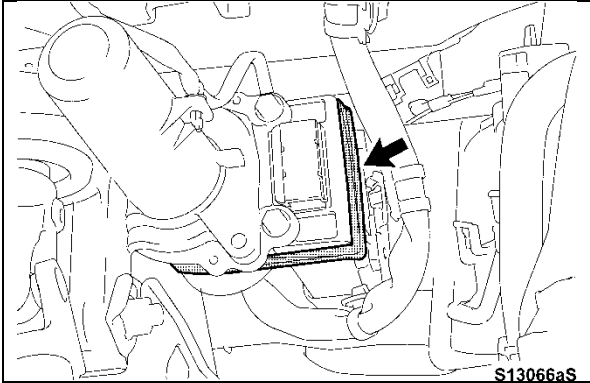


8. REMOVE THE EPS ECU

a) Remove the bolt from the EPS ECU.

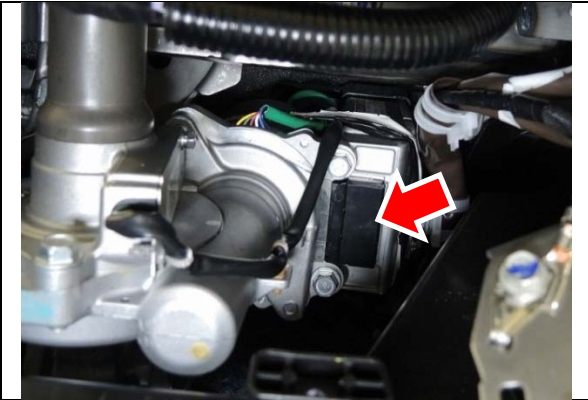


b) Remove and discard the vinyl tape from around the ECU and steering column.



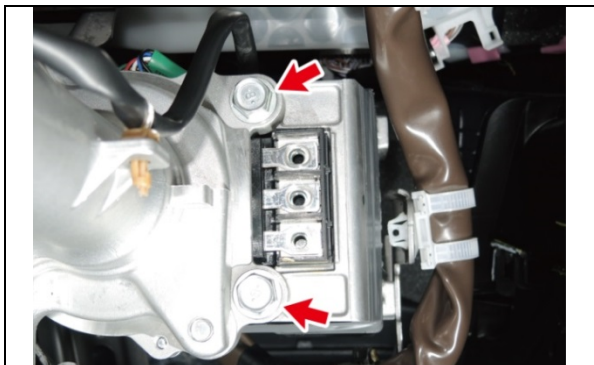
c) Disengage the 4 claws to remove the No. 2 power steering protector.

NOTE: If the No.2 protector is damaged replace it with a new one.



d) Remove the 3 terminal bolts.





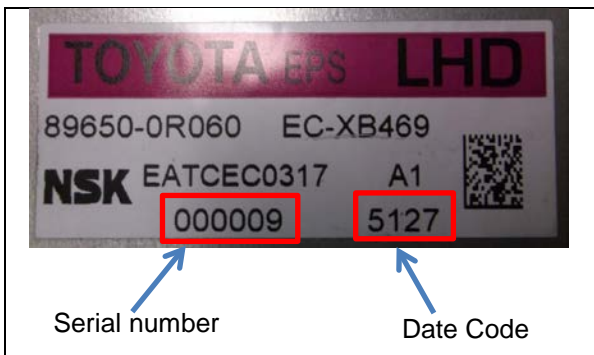
e) Remove the 2 bolts for the EPS ECU.



f) Remove the EPS ECU.



Do not damage the terminals on the steering column when removing the ECU.



9. INSPECT EPS ECU LABEL

- Locate the label on the EPS ECU.
- Take a picture of the EPS ECU label shown.
- Record the EPS ECU Serial number and Date Code.

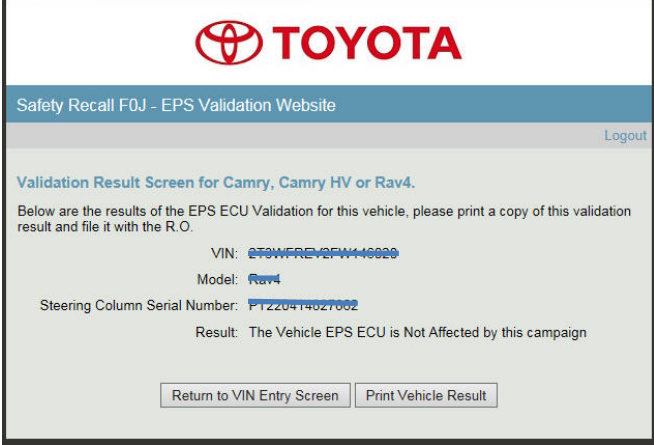
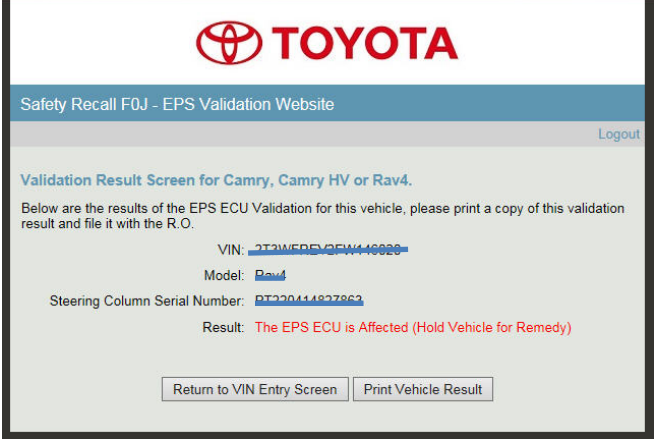
d) Go to <http://nds-f0j.imagespm.info/login.cfm>

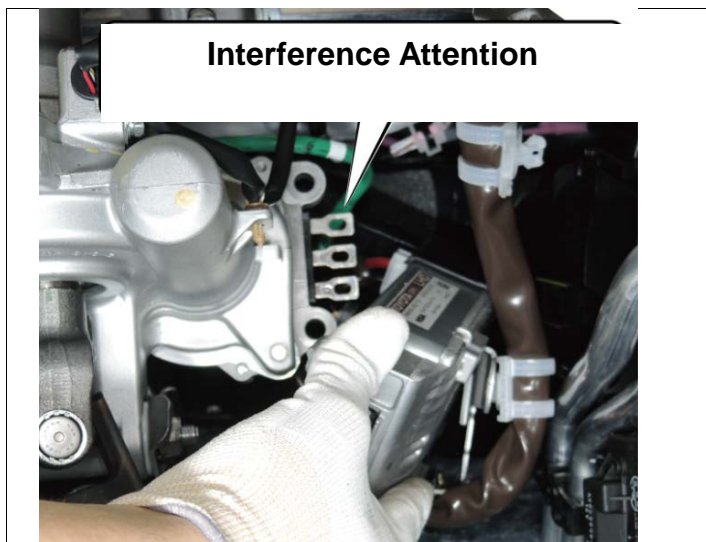
Upon initial login the default password is: "XXXXXX"
Please note that each dealer only has a single account, so please ensure that the reset password is communicated to all technicians and dealer associates that will be utilizing this website.

- Input the requested information to the web site.
- Upload label picture to website.

NOTE: Only Dealer stock VIN's are searchable at this time. If you have a Dealer stock vehicle involved in F1J and the VIN is not found on this web site contact your Region.

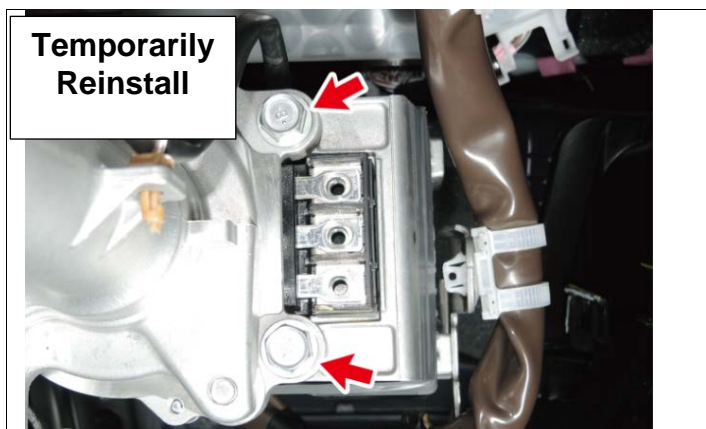
Website result

Website result	Website result
 <p>OK</p> <p>Print website results and attach to repair order</p> <p>Proceed to Step 10</p> <p>NOTE: If you do not print the results at this time you have to reenter all the vehicle information.</p>	 <p>NG</p> <p>Print website results and attach to repair order</p> <p>HOLD VEHICLE For Final Remedy</p>

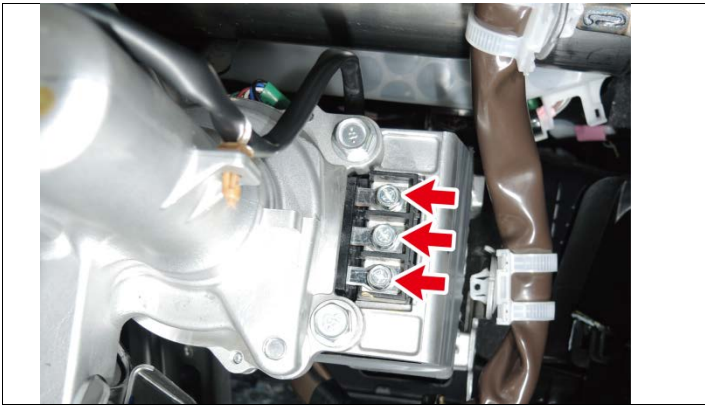


10. REINSTALL THE EPS ECU

- Reinstall the EPS ECU.

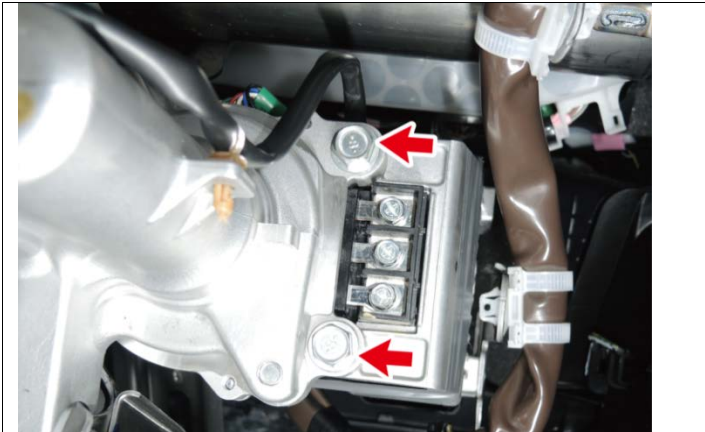


- Temporarily reinstall the 2 bolts for the EPS ECU.



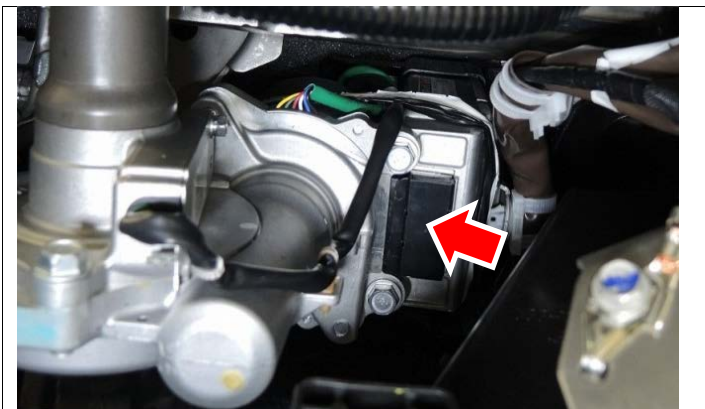
c) Reinstall the 3 terminal bolts.

TORQUE:
3.2 N*m (33 kgf*cm, 28 in*lbf)

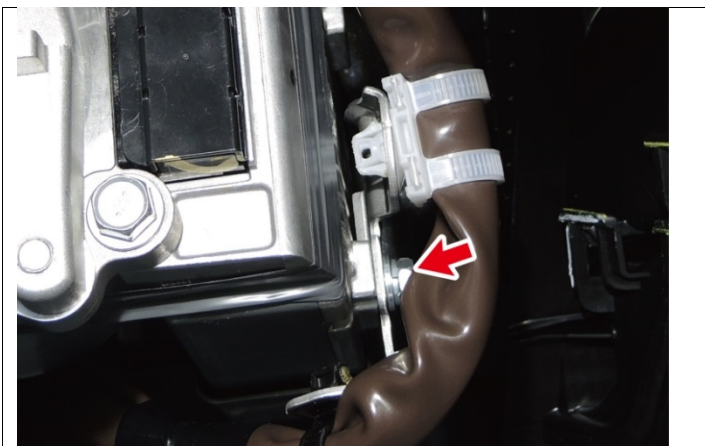


d) Torque the 2 ECU bolts.

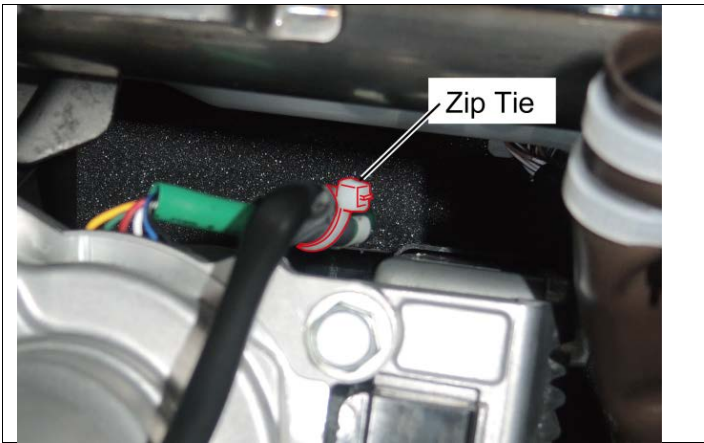
TORQUE:
20 N*m (204 kgf*cm, 15 ft*lbf)



e) Reinstall the No.2 EPS ECU protector.

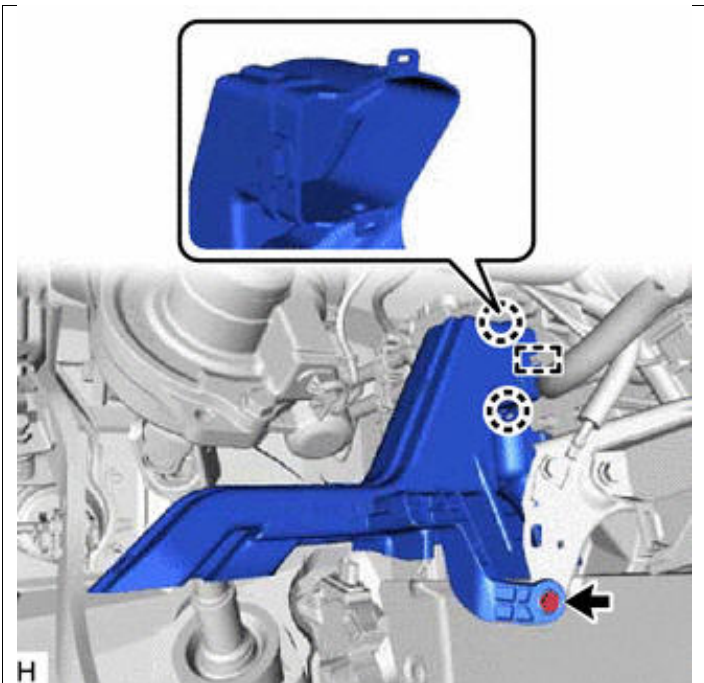


f) Reinstall the clamp bracket and bolt.



g) Secure the 2 harnesses with a zip tie.

NOTE: Place the zip tie on the green protective tubing approximately 20mm from the end as shown



11. REINSTALL THE No. 4 AIR DUCT

12. REINSTALL THE LOWER No.1 PANEL AIRBAG

Refer to the Technical Information System (TIS), using the applicable vehicle and model year.

[Highlander](#)

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13. CHECK AND CLEAR ANY DTC's

◀ **VERIFY REPAIR QUALITY** ▶

If you have any questions regarding this update, please contact your regional representative.

VII. APPENDIX

A. CAMPAIGN DESIGNATION DECODER

